Dear Bruce:

A hasty reply to yours of the 17th, received just a few minutes ago. I think I do have the pedigrees you talk about; I agree that the procedure you suggest is the most sensible. But I think you should include any pedigrees that are used to support any particular inferences. I have been quite preoccupied with isolation work on conjugal E. coli, and have not gotten back to trails for some time. The main trouble was that I couldn't quite see what would be a really decisive experiment. I am incling more and more to agree that the data as they stand now should be published, but with some caution as to spefic conclusions. If we can manage to cover, briefly, all the hypotheses we can think of, and indicate what we consider to be the pros and cons, I would suppose we should be able to come to agreement. If there are any extensive figures, my earlier suggestion of the Proc. Nat. Acad. Sci. U.S. is out, but I do not thank it should go to a microbiological journal. How about the Proc. Rot. Soc. London -- do you have access to it? Or else Heredity, or Genetics here. Journal of Genetics unfortunately takes forever. (I notice by the xx way that you are now helping to edit the J.G.M. I hope you will be able to improve the level of the genetics contributions. The last couple of papers from Rowley & Co. badly needed some editing, not only in re controversial science, but the form of presentation of data. If this becomes too abstruse, I would recommend you consult with Cavalli who concluded, by the way, a most enjoyable visit].)

To get to Helen Bernstein's problem— frankly she has been rather a disappointment. She would make an excellent assistant, and, for that matter probably will assist qualify for a Ph.D., as standards go these days, but I have been rather fruitlessly waiting for signs of any serious imaginative insight or analysical ability. What she lacks here for a degree is primarily a thesis that would display her capacity for independent research.

On the other hand, it is quite probable that her involvement with her personal affairs during the last several months is partly responsible for her current rating, and that she might pick upmagain if she is remotivated for research. If she wants to continue, I would certainly recommend her to you provided you can establish a farm hand at the start. I would particularly recommend that you (together) suggest a problem in which you will have a definite and continued interest, so that she can get the stimulation of it from you. I should have been able to foretell her experience here when she abjectly failed to formulate a thesis problem of her own. She spent one year (after I gave up waiting for her, and in hopes she would pick up something here else herself) in a fruitless analysis of Weeds's B/Cu, which never did come to grips with the basic assues (granted she had some initial difficulties in reproducing the effects, and did straighten that out). Her second research year through to now has been on a study of compatibility behavior (F) in a few new coli lines. Again the routine aspects have gone ahead, rather slowly, but no more.

On the credit side, she knows a fair but of the lab. routine and the jargon of bacterial genetics, and something (not enough) of the recent literature. On this account, you probably would find it worthwhile to take her on as a research student, at least long enough to make your own evaluation. In my experience people mature in jumps, often when they assume new responsibilities, and I can at least hope she would make a fresh start. If your lab operates with a reasonable discipline, to bolster her own sense of responsibility, and she works or a problem of

immediate interest to you, you would have nothing to lose, and might be doing her an important service.

Of any of the possible places she might work at in London, yours is the only one I would consider recommending her to.

We were sorry to hear of your illness. As Esther mentions in her Xmas card, we should exchange another tape, but your performance set a discouragingly unmatachable standard.

Sorry to be so unfriendly and not writing, but this semester, or as far back as I can remember now, has been a horror. Not the least of the chores are at the house, but the little time we have for it has been well spent. WE'll send you a picture sometime—it is a 3-bedroom(small) lannon stone, one floor + basement, set up on a rather hilly street (13 ft. above road) at the Western edge of town, actually not too far from University Houses. We have a fair-size living-dining room combination, and a huge window (about 6 x 10 feet) that barely manages to overlook our neighbours below across the street to some sort of rural view. One of the rooms is usedf for a study, another as a guest toom.

The basement is well laid out, one room finished (or nearly so) about  $10 \times 20^8$  serves as a seminar room for our biweekly lab. meetings. The rest has a pingpong table, and the usual utilities (including an extra shower & toilet). This room also has a sofa-bed and we use it as a second guest "apartment". We are in the course of building a garage, under our front lawn to connect the basement with the street, and except that we had an unseaonal thaw today (about  $40^{\circ}$ !) I would have said the works are buried in snow. But unfortunately, it probably will be a White Christmas yet.

Yours, as ever,

Joshua Lederberg